CENTRAL REGIONAL LABORATORY

Data Checklist

Data Set AIR 20010072 Cheshire Monitoring Study
Inorganics - metals

☑ Chain-of-Custody

☑ Analysis Request Form(s)*

☐ Sample Tags

☑ Transmittal Report w/signatures of the following:

- Analyst (s)
- Data Management Coordinator

* Analysis Request Forms provide the data user a means to connect sample numbers with sampling locations

Prepared by: Sylvia Griffin 9-26-01
Data Management Coordinator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: SEP 2 6 2001

Subject: Review of Region 5 Data for **Cheshire Monitoring Study**

From: **John V. Morris, Chemist**
Region 5 Central Regional Laboratory

To:

Attached are the results for: **Cheshire Monitoring Study**

CRL data set number: **20010072**

Samples analyzed for: **Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Magmesium, Manganese, Nickel and Selenium**

Results are reported for sample designations: **2001AH09S01, 2001AH09D01, 2001AH09S02 and 2001AH09S03**

SEP 2 6 2001

Data Management Coordinator and Date Received

Date Transmitted: SEP 2 6 2001

Please have the U.S. EPA Project Manager/Officer complete the Customer Satisfaction Survey, attached, or call the CRL Sample Coordinator at 3-1226.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML-10C

/ /

Received by and Date

Comments:

US EPA CRL - Region V
ICP Final Report Results
Air Filters

Sample Number:	2001AH09S01	Station ID:	GUIDING HANDS SCHOOL
Sample Batch Number:	20010072	Study:	Cheshire Monitoring Study
Collection Date:	10 Sept 01	Filter SN:	G6093498
Analysis Date:	21 Sept 01		

Element	Concentration		Units
Arsenic	9	U	µg/filter
Barium	95	U	µg/filter
Beryllium	0.6	U	µg/filter
Cadmium	0.6	U	µg/filter
Chromium	3.14	U	µg/filter
Cobalt	1.2	U	µg/filter
Copper	1170		µg/filter
Iron	324		µg/filter
Lead	6	U	µg/filter
Magnesium	343	U	µg/filter
Manganese	10.1		µg/filter
Nickel	5.73	U	µg/filter
Selenium	18	U	µg/filter

JM
25 Sept 01

US EPA CRL - Region V
ICP Final Report Results
Air Filters

Sample Number:	2001AH09D01	Station ID:	GUIDING HANDS SCHOOL
Sample Batch Number:	20010072	Study:	Cheshire Monitoring Study
Collection Date:	10 Sept 01	Filter SN:	G6093499
Analysis Date:	21 Sept 01		

Element	Concentration		Units
Arsenic	9	U	µg/filter
Barium	95	U	µg/filter
Beryllium	0.6	U	µg/filter
Cadmium	0.6	U	µg/filter
Chromium	3.14	U	µg/filter
Cobalt	1.2	U	µg/filter
Copper	153		µg/filter
Iron	393		µg/filter
Lead	6	U	µg/filter
Magnesium	343	U	µg/filter
Manganese	13.2		µg/filter
Nickel	5.73	U	µg/filter
Selenium	18	U	µg/filter

25 Sept 01

US EPA CRL - Region V
ICP Final Report Results
Air Filters

Sample Number:	2001AH09S02	Station ID:	RVHS
Sample Batch Number:	20010072	Study:	Cheshire Monitoring Study
Collection Date:	10 Sept 01	Filter SN:	G6093500
Analysis Date:	21 Sept 01		

Element	Concentration		Units
Arsenic	9	U	µg/filter
Barium	95	U	µg/filter
Beryllium	0.6	U	µg/filter
Cadmium	0.6	U	µg/filter
Chromium	3.14	U	µg/filter
Cobalt	1.2	U	µg/filter
Copper	46.4		µg/filter
Iron	272		µg/filter
Lead	6	U	µg/filter
Magnesium	343	U	µg/filter
Manganese	12.0		µg/filter
Nickel	5.73	U	µg/filter
Selenium	18	U	µg/filter

25 Sept 01

US EPA CRL - Region V
ICP Final Report Results
Air Filters

Sample Number:	2001AH09S03	Station ID:	ADDAVILLE
Sample Batch Number:	20010072	Study:	Cheshire Monitoring Study
Collection Date:	10 Sept 01	Filter SN:	G6093501
Analysis Date:	21 Sept 01		

Element	Concentration		Units
Arsenic	9	U	µg/filter
Barium	95	U	µg/filter
Beryllium	0.6	U	µg/filter
Cadmium	0.6	U	µg/filter
Chromium	3.14	U	µg/filter
Cobalt	1.2	U	µg/filter
Copper	227		µg/filter
Iron	188		µg/filter
Lead	6	U	µg/filter
Magnesium	343	U	µg/filter
Manganese	7.74		µg/filter
Nickel	5.73	U	µg/filter
Selenium	18	U	µg/filter

25 Sept 01

Date: 25 September 2001
Analyst: John V. Morris
Sample Batch Number: 20010071,72&73
Facility Name: Cheshire Monitoring Study
Analyte: ICP Metals

Narrative for the Analysis of Metals in Air Filters in Batches 20010071,72&73

On 19 September 2001, three batches of air filters, comprising four air filters each, were received at CRL for analysis for metals. The sample descriptions are given in tabular form:

Batch No.	Sample ID	Serial No.	Collection Date	Station ID
20010071	2001AH08S01	G6093496	4 September 2001	GUIDING HANDS SCHOOL
	2001AH08D01	G6093497	4 September 2001	GUIDING HANDS SCHOOL
	2001AH08S02	G6093495	4 September 2001	RVHS
	2001AH08S03	G6093494	4 September 2001	ADDAVILLE
20010072	2001AH09S01	G6093498	10 September 2001	GUIDING HANDS SCHOOL
	2001AH09D01	G6093499	10 September 2001	GUIDING HANDS SCHOOL
	2001AH09S02	G6093500	10 September 2001	RVHS
	2001AH09S03	G6093501	10 September 2001	ADDAVILLE
20010073	2001AH10S01	G6093502	16 September 2001	GUIDING HANDS SCHOOL
	2001AH10D01	G6093503	16 September 2001	GUIDING HANDS SCHOOL
	2001AH10S02	G6093504	16 September 2001	RVHS
	2001AH10S03	G6093505	16 September 2001	ADDAVILLE

The analysis was limited to the thirteen metals listed on page 15 of the QAPP.

The samples were prepared on 20 September 2001. Method Metals_006, a hot block adaptation of the beaker digestion given in 40 CFR Part 50, Appendix G, was used for the digestion. The digestion log number was 1311. There are no holding times for the air program.

Three filter blanks were prepared, but were taken from a different box than the field samples because all of the one box had been shipped to the field. These blank filters are taken from the next series to be shipped to the field, so this data will be used to generate new limits for blank

Date: 25 September 2001
Analyst: John V. Morris
Sample Batch Number: 20010071,72&73
Facility Name: Cheshire Monitoring Study
Analyte: ICP Metals

subtracted results. The previous blank data was used for blank subtraction, only applying blank subtraction to the elements barium, chromium, iron, magnesium and nickel. All other elements reported had filter blank results well below the detection limits of the respective analytes. For the five above named elements, the average filter blank from the measurements performed alongside earlier batches from this study and data collected on filter blanks prior to the begin of field collection, was subtracted from the measured results. This was done as described in section 11.2 of the CRL SOP Metals_006 to remove the contribution to the result from the glass fiber filter itself. The reporting limits used for those five elements were derived from ten times the standard deviation of the data used to arrive at the average blank.

The analysis was performed on 21 September 2001 using method Metals_003, using the Perkin-Elmer 3300DV ICP. The yttrium internal standard readings were consistent throughout the run.

For the thirteen metals reported for this study, all instrument check standards (LCM1, LCM2, Hi AQC) were in control, with the exception of the fourth LCM1. That instrument check was low for copper (87.3%) and manganese (89.1%), so the run was halted, the instrument recalibrated, and the sample information file rebuilt to analyze everything from the last valid set of instrument checks. Thus, only the filter blanks and the first three samples of 20010071 are reported from the first calibration. The blanks showed some out-of-control audits, but none were of any consequence to the data. For the initial calibration, arsenic, beryllium, cobalt, copper, magnesium and manganese were more negative than the MDL for the instrument blanks (LCB) straddling the field samples. None of this negative bias, if compensated for, would result in a reportable concentration for arsenic, beryllium or cobalt, or would be more than a percent or two change for the others. These blanks were just high (above MDL) for iron and lead, and for iron, there was no effect. For lead, there was a slight effect, but none of the first three samples (2001AH08S01, 2001AH08D01 and 2001AH08S02, to which the initial calibration applies) were false positives due to this blank. Because the effect on the sample with the least amount of lead (2001AH08S02), when corrected for the high instrument blank, was less than 20%, the result was not given a "J" flag. Subsequent samples were just below reporting limits, where the second calibration had lead within ± MDL. The second calibration had instrument blanks (fifth, sixth and seventh) with positive bias for beryllium, iron and magnesium, and negative once for manganese, and low once for magnesium. These had no effect on the data. The digestion blank (LRB) had several flags, similar to the first calibration under which it was run, but all had no effect on the data.

The first report level check (RLC) was within 80-120% recovery for most of the 13 elements, and in 75-125% for cobalt and iron. Copper, magnesium and manganese were outside these limits, possibly affected by the negative bias seen in the instrument blanks. The second RLC

Date: 25 September 2001
Analyst: John V. Morris
Sample Batch Number: 20010071,72&73
Facility Name: Cheshire Monitoring Study
Analyte: ICP Metals

was within 80-120% recovery for all except beryllium, iron and magnesium. Again, the failures match with elements which were out on the blank. The other instrument checks for these elements were all in control, and the data for these two elements were far above the reporting limits, at least before filter blank subtraction. The duplicate filter digestion was within ±20% for the relative percent difference (RPD) or within ± the MDL for the difference.

Three digests were greater than the calibration standard for copper, 2001AH08S01, 2001AH10S01, and its duplicate. The two-fold dilutions were inserted into the run in the second sample information file used after the recalibration, and the copper data is taken from these dilutions.

Again, as with some earlier batches, all the co-located S01 and D01 sample pairs in these three batches have results that are quite different within each pair. Again it appeared that the exposed portion is much darker for the sample S01 than for sample D01, as is consistent with the analytical results.

The printer had some problems early in the run, with some pages lost to jammed paper. After an adjustment was made, the printer problems were relieved. The affected part of the raw data (through sequence number 38) was reprinted from the electronic record the following working day (24 September 2001).

All analytical results files, sample information files and reformat files for ICP analysis can be found on the R5CRL data server using the following path:
h:\r5crl\vol3\metals\jvmorris\20010071_72_73\3300dv\

The narrative, QC summary spreadsheets, sample result calculation spreadsheets and the final sample report for ICP analysis can be found on the R5CRL data server using the following path:
h:\r5crl\vol3\metals\jvmorris\20010071_72_73\reports\

CENTRAL REGIONAL LABORATORY

Data Checklist

Data Set AIR 20010072 Cheshire Monitoring Study Suspended Particles

☑ Chain-of-Custody

☑ Analysis Request Form(s)*

☐ Sample Tags

☑ Transmittal Report w/signatures of the following:

- Analyst (s)
- Data Management Coordinator

* Analysis Request Forms provide the data user a means to connect sample numbers with sampling locations

Prepared by: Sylvia Griffin 9-25-01
Data Management Coordinator

Rev. 5/4/00

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: SEP 25 2001

Subject: Review of Region 5 Data for **CHESHIRE MONITORING STUDY**

From: **Francis A. Awanya, Chemist** FAA
Region 5 Central Regional Laboratory

To:

Attached are the results for: **CHESHIRE MONITORING STUDY**

CRL data set number: **20010072**

Samples analyzed for: **Suspended Particles**

Results are reported for sample designations: **2001AH09S01, 2001AH09D01, 2001AH09S02, and 2001AH09S03.**

SEP 25 2001

Data Management Coordinator and Date Received

Date Transmitted: SEP 25 2001

Please have the U.S. EPA Project Manager/Officer complete the Customer Satisfaction Survey, attached, or call the CRL Sample Coordinator at 3-1226.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML-10C

_____ / /

Received by and Date

Comments:

Data Set Number:	*20010072*	**Parameter:**	*Suspended Particles*
Facility Name:	*CHESHIRE MONITORING STUDY*		
Study Name:	*CHESHIRE MONITORING STUDY*		
Date of Narrative:	*09/24/2001*	**Analyst:**	*FAA*
		Signature:	FAA

ANALYSIS CASE NARRATIVE

Four (4) exposed filters were received for suspended particle analysis at the Central Regional Laboratory (CRL) on September 19, 2001. Those filters were fractions of clean filters, prepared at the CRL and sent to the field for exposure. Filter preparations and final weighting of exposed filters were performed according to CRL.SOP AIG047. Analysis of exposed filters were completed on 9/21/2001.

Both a tear and pinhole size hole were observed on one side of exposed filter Q6280068 (CRL sample I.D number 2001AH09S03). A small tear and pin size hole were also observed in exposed filter Q6280066 (CRL sample I.D number 2001AH09S01). Two large tears were observed along one side of exposed filter Q6280065 (CRL sample I.D number 2001AH09D01). Use those results with caution. Suspended particle results for those samples could be biased low due to loss of particles or filter materials. A probable cause for those tear or scratches are activities related to removal of exposed filters from the individual sampling equipment in the field. Use the data with caution.

Exposed filter Q6280067 (CRL sample I.D number 2001AH09S02) had no tear or holes. The result is acceptable for use.

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
77 West Jackson Boulevard
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
01AH09	Cheshire Monitoring Study

Activity Code: 12345

90014

AIR 2001 0072

SAMPLERS: *(Print Name and Sign)*
Mike Murphy Mike Murphy Mike Murphy

STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	Analyte	TAG NUMBERS
DO1	9/10	00:00	X		GUIDING HANDS SCHOOL	2		5-340059 1 to 2
SO1	9/10	00:00	X		GUIDING HANDS SCHOOL	2		5-340058 1 to 2
SO2	9/10	00:00	X		RVHS	2		5-340060 1 to 2
SO3	9/10	00:00	X		ADDAVILLE	2		5-340061 1 to 2
								Guiding Hands School
								Serial # 3013, Avg PStg = 19.5 inches of H2O
								Serial # 3012, Avg PStg = 19.6 inches of H2O
								RVHS
								Serial # 3009, Avg PStg = 19.75 inches of H2O
								Addaville # 3011, Avg PStg = 19.7 inches of H2O

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Ship To:
Mike Murphy	9-12-01 1:45	William Lyon Jr	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	ATTN:
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) William Lyon Jr	Date / Time 9/19/01 16:09

Airbill Number
UPS# 1Z 409 1901 4049 5530

Chain of Custody Seal Numbers

5-140014

Project No. 01AH09 Project Name CHESHIRE MONITORING STUDY 901UIA

AIR 200100072 ARRIVAL DATE: 9/19/2001 DUE DATE: 9/26/2001

Sampler
Mike Murphy

Cooler ID 1 Page 5-140014

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
01AH09DO1	DO1	10/09/2001 00:00:00	○ Grab ● Com	GUIDING HANDS SCHOOL	2	5-340059 1 to 2

Bottle No. 1 Parameter: Metal analysis by ICP

Bottle No. 2 Parameter: PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
01AH09SO1	SO1	10/09/2001 00:00:00	○ Grab ● Com	GUIDING HANDS SCHOOL	2	5-340058 1 to 2

Bottle No. 1 Parameter: Metal analysis by ICP

Bottle No. 2 Parameter: PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
01AH09SO2	SO2	10/09/2001 00:00:00	○ Grab ● Com	RVHS	2	5-340060 1 to 2

Bottle No. 1 Parameter: Metal analysis by ICP

Bottle No. 2 Parameter: PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
01AH09SO3	SO3	10/09/2001 00:00:00	○ Grab ● Com	ADDAVILLE	2	5-340061 1 to 2

Bottle No. 1 Parameter: Metal analysis by ICP

Bottle No. 2 Parameter: PM10

ENVIRONMENTAL PROTECTION AGENCY
REGION V
CENTRAL REGIONAL LABORATORY
FINAL RESULT REPORT FOR THE TEAM: ANALYTICAL AND INORGANIC (A&I)

DIVISION/BRANCH: AIR DIVISION **SAMPLING DATE:** 09/10/2001 **LAB ARRIVAL DATE:** 09/19/2001 **DUE DATE:** 09/26/2001
DU NUMBER: 90101A **DATA SET NUMBER:** 20010072 **STUDY:** CHESHIRE MONITORING STUDY **PRIORITY:** 1 **LABORATORY :**CRL

SAMPLE #	CRL LOG NUMBER	SAMPLE DESCRIPTION	SUSPENDED PARTICLE (g/filter)			
1	2001AH09D01	GUIDING HANDS SCHOOL	0.0127			
2	2001AH09S01	GUIDING HANDS SCHOOL	0.0121			
3	2001AH09S02	RVHS	0.0199			
4	2001AH09S03	ADDAVILLE	0.0118			
DATE OF ANALYSIS			09/21/2001			
ANALYST			FMA			

Reviewed by: E.S Date: 9/25/2001

ATTACHMENT II

CRL Analytical and Inorganics Data Review Checklist

Batch Number: 20010072 Facility: CHESHIRE MONITORING STUDY

Parameter: SUSPENDED PARTICLE CRL.SOP: AIG-017

Package Overview:	YES	NO
Raw Data Package Complete?	✓	
Results Reported Correctly?	✓	
Special Requests Done?	N/A	
Calculations Checked?	✓	
Calibration Not Exceeded?	N/A	
Manual Peak Integration performed? Circle one IC or GC and Check	N/A	
Field QC Checked?	N/A	
Quality Control:		
Holding Times Met?	N/A	
Preservation Checked?	N/A	
Proper Digestion Verified?	N/A	
Initial Instrument Performance Checks Verified?	✓	
Calibration Verification Checked?	N/A	
Sample-Specific QC (Internal Standards or Analytical Spikes) Okay?	N/A	
Matrix QC Checked?	N/A	
Digestion Blanks Checked?	N/A	
Spiked Blank Checked?	N/A	
LCS (if applicable) Checked?	N/A	
QCS (if applicable) Checked?	N/A	
Final Check		
Technical Review Done?	✓	
Narrative Complete?	✓	

Analyst: FWN Peer Reviewer: E.S

Date: 9/21/2001 Date: 9/25/2001

Comments Attached? (Y/N) N

Data Set Number:	*2010072*	**Parameter:**	*Suspended Particles*
Facility Name:	*CHESHIRE MONITORING STUDY*		
Study Name:	*CHESHIRE MONITORING STUDY*		
Date of Narrative:	*09/24/2001*	**Analyst:**	*FAA*
		Signature:	FAA

ANALYSIS CASE NARRATIVE

Four (4) exposed filters were received for suspended particle analysis at the Central Regional Laboratory (CRL) on September 19, 2001. Those filters were fractions of clean filters, prepared at the CRL and sent to the field for exposure. Filter preparations and final weighting of exposed filters were performed according to CRL.SOP AIG047. Analysis of exposed filters were completed on 9/21/2001.

Both a tear and pinhole size hole were observed on one side of exposed filter Q6280068 (CRL sample I.D number 2001AH09S03). A small tear and pin size hole were also observed in exposed filter Q6280066 (CRL sample I.D number 2001AH09S01). Two large tears were observed along one side of exposed filter Q6280065 (CRL sample I.D number 2001AH09D01). Use those results with caution. Suspended particle results for those samples could be biased low due to loss of particles or filter materials. A probable cause for those tear or scratches are activities related to removal of exposed filters from the individual sampling equipment in the field. Use the data with caution.

Exposed filter Q6280067 (CRL sample I.D number 2001AH09S02) had no tear or holes. The result is acceptable for use.

CHESHIRE AIR MONITORING PROJECT
PM10

Parameter: Suspended Particles

Data Set Numbers: 20010071, 20010072, 20010073

Date of Analysis 9/21/2001

Analyst: FAA

BALANCE VERIFICATION:

Sandard Weights Actual (g)	Balanced weight Balanced (g)	Differences (g)
		Limit +/-0.0005 g
Data set Number 20010071,72,73		
1.0000	0.9998	0.0002
1.0000	0.9999	0.0001
2.0000	2.0000	0.0000
2.0000	1.9998	0.0002
5.0000	4.9999	0.0001
5.0000	4.9998	0.0002

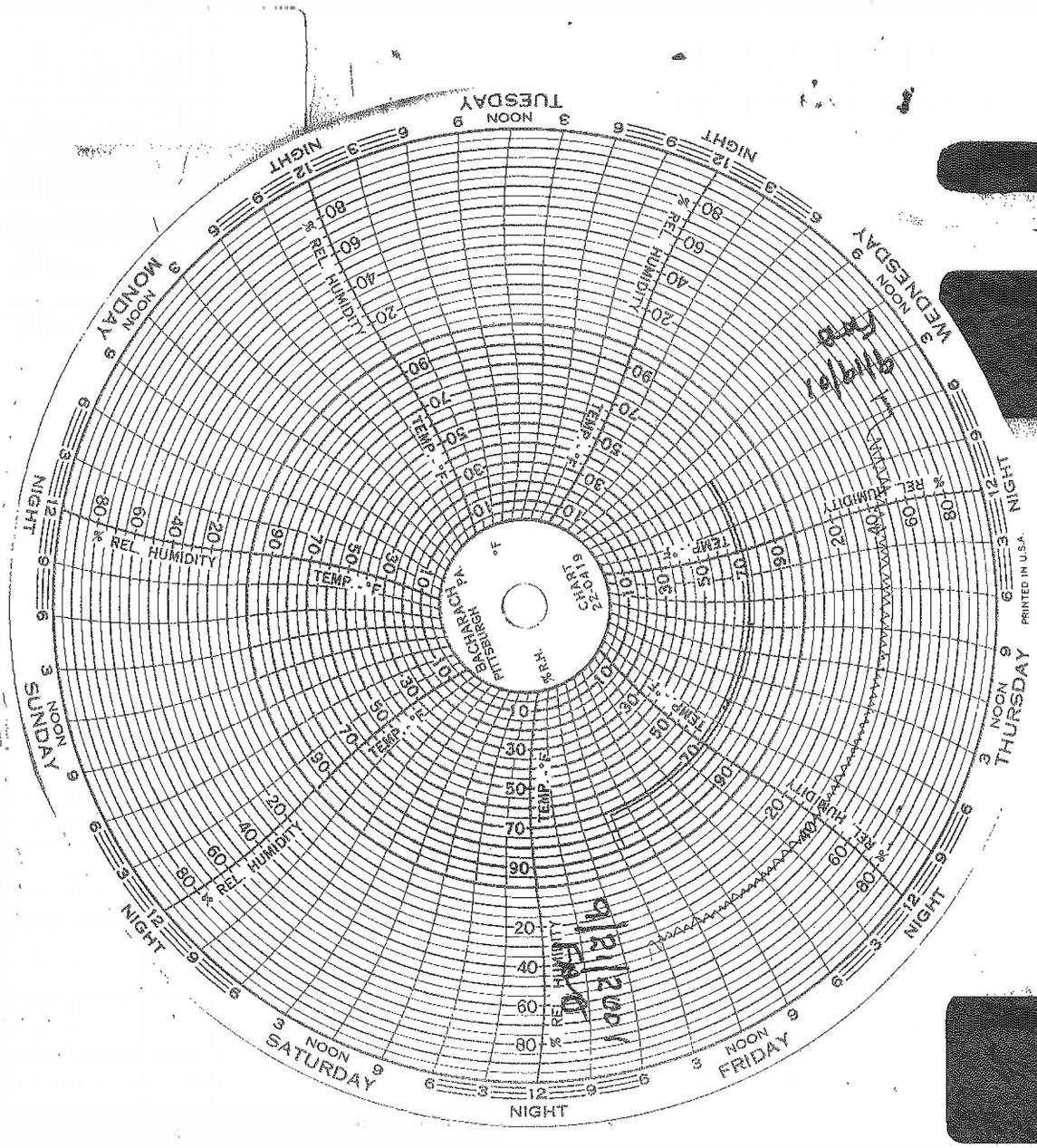
QC-SUMMARY FOR EXPOSED FILTERS

Filter ID Number	CRL Sample I.D Number	Sampling Date	ANALYST	Exposed weight (g)
Data set Number 20010071,72,73				
Q6280072	2001AH10S03	09/16/01	Analyst 1	4.3982
Q6280072	2001AH10S03	09/16/01	Analyst 2	4.3986
Differences (Limit +/- 5 mg).....				-0.0004
Q6280071	2001AH10S02	09/16/01	Analyst 1	4.3979
Q6280071	2001AH10S02	09/16/01	Analyst 2	4.3982
Differences (Limit +/- 5 mg).....				-0.0003
G1006688	2001AH08S02	09/04/01	Analyst 1	4.4428
G1006688	2001AH08S02	09/04/01	Analyst 2	4.4427
Differences (Limit +/- 5 mg).....				0.0001

CHESHIRE AIR MONITORING PROJECT
PM10

Filter ID Number	CRL Sample I.D Number	Sampling Date	Station Location	Sampler SN	Pstg Avg	P1/Pa	Total Volume (M^3)	Pre Weight of filters (g)	Exposed weight (g)	Weight Gain	PM10 (UG/M^3)
Data set Number 20010071											
Q6280063	2001AH08D01	09/04/01	Guiding Hands School	3013	19.50		**0.00**	4.3705	4.3823	0.0118	ERR
Q6280064	2001AH08S01	09/04/01	Guiding Hands School	3012	20.25		**0.00**	4.3691	4.3805	0.0114	ERR
G1006688	2001AH08S02	09/04/01	RVHS	3009	15.65		**0.00**	4.4083	4.4428	0.0199	ERR
Q6280062	2001AH08S03	09/04/01	Addaville	3011	19.90		**0.00**	4.3919	4.4234	0.0315	ERR
Data set Number 20010072											
Q6280065	2001AH09D01	09/10/01	Guiding Hands School	3013	19.50		**0.00**	4.3824	4.3951	0.0127	ERR
Q6280066	2001AH09S01	09/10/01	Guiding Hands School	3012	19.60		**0.00**	4.3774	4.3895	0.0121	ERR
Q6280067	2001AH09S02	09/10/01	RVHS	3009	19.75		**0.00**	4.3312	4.3433	0.0199	ERR
Q6280068	2001AH09S03	09/10/01	Addaville	3011	19.70		**0.00**	4.3858	4.3976	0.0118	ERR
Data set Number 20010073											
Q6280070	2001AH10D01	09/16/01	Guiding Hands School	3013	20.00		**0.00**	4.3585	4.3733	0.0148	ERR
Q6280069	2001AH10S01	09/16/01	Guiding Hands School	3012	18.95		**0.00**	4.3932	4.4086	0.0154	ERR
Q6280071	2001AH10S02	09/16/01	RVHS	3009	19.90		**0.00**	4.3773	4.3979	0.0199	ERR
Q6280072	2001AH10S03	09/16/01	Addaville	3011	19.70		**0.00**	4.4025	4.3982	-0.0043	ERR

Filters ID	TARE Wt. (g)	Dep. Wt (g)	Exposed Wt (g)	Exposed Dep. Wt (g)	Comments
~~Q280083~~					
Q6280082	4.3897				
Q6280081	4.3563				
Q6280080	4.3521				
Q6280079	4.3681				
Q6280078	4.3542				
Q6280077	4.3320	4.3320 KS			
Q6280076	4.3650				
Q6280075	4.3640				
Q6280074	4.3634				
Q6280073	4.3861				
Q6280072	4.4025		4.3982	9/21/01 E.S 4.3986	Tear on one side slight cut.
Q6280071	4.3773		4.3979	9/21/01 E.S 4.3982	
Q6280070	4.3585		4.3733	9/21/01 E.S 4.3735	Tear at fold (small)
Q6280069	4.3932		4.4086		
Q6280068	4.3858		4.3976		tear and pinhole on one side
Q6280067	4.3312	4.3300 KS	4.3433		
Q6280066	4.3774		4.3895		small tear and pinhole
Q6280065	4.3824		4.3951		2 large tears along one side
Q6280064	4.3691		4.3805		
Q6280063	4.3705		4.3823		Large tear in filter / scratch
Q6280062	4.3919		4.4234		pin hole size tear
Q6280061	4.3773		4.4345		
Q6280060	4.3806	4.3805 KS	4.4279	4.4278	
Q6280059	4.3591		4.4093		


TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
SUNDAY
MONDAY
NOON
NIGHT
REL. HUMIDITY
TEMP. °F
BACHARACH P.V.
PITTSBURGH
CHART
22-0419
PRINTED IN U.S.A.

US EPA Region 5 Field Sample

5-340059-2

Parameters PM10

2001 0072

Preservative None | S M MD B D
Sample ID 01AH09D01 | X

Sampler Mike Murphy

Date 9-12-01

AIRS [redacted]

PM-10 ✓ OPERATOR OEPA DATE 9-10-0

TSP ______ SITE Guiding Hands School # 3013 Dup # Q628 0065

AVG. RECORDER RESP. 19.5 TEMP ______ °C ______ K FINAL WT ______

ELAPSED TIME 1440 MINUTES PRESS ______ mmHg INITIAL WT ______

FLOW ______ m^3/min TOTAL FLOW ______ m^3 SAMPLE WT ______

STD ______ ACTUAL ______ PM-10 ______ ug/m^3

COMMENTS: ______

EPA 3300 (REVISED 10/91)

US EPA Region 5 Field Sample
5-140058-2
Parameters PM10
2001007?
Preservative None S M MD B D
Sample ID 01AH09S01 X
Sampler Mike Murphy
Date 9-12-01

10 ✓ AIRS [redacted] ________ OPERATOR OEPA DATE 9-10-01

SITE Guiding Hands School # 3012, # Q6280066

G. RECORDER RESP. 196 TEMP ____ °C ____ K FINAL WT ____ g

APSED TIME 1440 MINUTES PRESS ____ mmHg INITIAL WT ____ g

W ____ m^3/min TOTAL FLOW ____ m^3 SAMPLE WT ____ g

____ ACTUAL ____ PM-10 ____ $^{ug}/_{m^3}$

MMENTS: ____

(REVISED 10/91)

US EPA Region 5 Field Sample

5-340060-2

Parameters PM10

2001 0072

Preservative None

Sample ID 01AH09SO2

S M MD B D

X

Sampler Mike Murph

Date 9-12-01

-10 ✓ AIRS [redacted] ______ OPERATOR OEPA DATE 9-10-01

P ______ SITE RVHS # 3009, #QC280067

G. RECORDER RESP. 19.75 TEMP ____ °C ____ K FINAL WT ____ g

APSED TIME 1440 MINUTES PRESS ____ mmHg INITIAL WT ____ g

OW ____ m^3/min TOTAL FLOW ____ m^3 SAMPLE WT ____ g

D ____ ACTUAL ____ PM-10 ____ ug/m^3

OMMENTS: ______

3306(REVISED 10/91)

US EPA Region 5 Field Sample

5-340061-2

Parameters PM10

20010072

Preservative None | S M MD B D

Sample ID 01AH09SO3 | X

Sampler Mike Murphy

Date 9-12-01

PM-10 ✓ SAROAD ____________ OPERATOR OEPA ____________ DATE 9-10-01

TSP ________ SITE Addaville #3011 #Q6290063 ____________

AVG. RECORDER RESP. 19.7 ______ TEMP ______ C ______ K FINAL WT ______ g

ELAPSED TIME 1448 ______ MINUTES PRESS ______ mmHg INITIAL WT ______ g

FLOW ____________ m^3/min TOTAL FLOW ______ m^3 SAMPLE WT ______ g

STD ________ ACTUAL ________ PM-10 ____________ ug/m^3

COMMENTS: ________________________________

EPA 3308

neral information	Standard weights, actual (g)	Balanced weights, balanced (g)
9/6/2001 FMA	0.100000	0.09999
METTLER AG285	0.20000	0.20000
S/N 1112018838	20.0000	20.0002
	50.0000	50.0003
9/7/2001 FMA	1.0000	1.0000
SARTORIOUS	1.0000	1.0000
S/N 37010119	2.0000	2.0000
	2.0000	2.0000
	5.0000	4.9999
	5.0000	4.9997
9/12/2001 FMA	1.0000	0.99998 FMA 9/12/01
SARTORIOUS	1.0000	0.99999 FMA 9/12/01
S/N 37010119	2.0000	1.9999
	2.0000	1.9998
	5.0000	4.9998
	5.000	5.0000
9/19/2001	0.10000	0.09999
	0.20000	0.20000
	STD WTS	ACTUAL
9/21/01	1.0000	0.9998
SARTORIOUS	1.0000	0.9999
S/N 37010119	2.0000	2.0000
	2.0000	1.9998
	5.0000	4.9999
	5.0000	4.9998